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Vorstand:
Prof. Dr. F. Kaudewitz

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Dr. Joshua Lederberg
Stanford University School of Medicine
Department of Genetics
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U S A

Dear Dr. Lederberg,

Thank you very much for your letter of August 72. You ask me if I tried to infect bacteria with isolated phage DNA. Some time ago I tried indeed transfection with purified DNA though not very seriously, without success. However, there are the papers of Rolf Benzinger, University of Virginia Dept. Biology, Charlottesville, where transfection with P22-DNA is described:

1) Benzinger, R., J. Kleber and R. Huskey "Transfection of Escherichia coli spheroplasts I. General facilitation of double-stranded deoxyribonucleic acid infectivity by protamine sulfate" J. Virology 7, 646 - 650 (1971)
2) Benzinger, R. and J. Kleber: "Transfection of Escherichi coli and Salmonella typhimurium spheroplasts: host-controlled restriction of infective bacteriophage P22 deoxyribonucleic acid" J. Virology 8, 197 - 202 (1971)

I hope I could help you with this information. It is very interesting what you wrote about Dr. Sgaramella's results. May I ask you for reprints if these are published? Our transducing DNA fragments are evidently composed of phage- and bacterial DNA which are covalently linked. Therefore the

ligase-action would be of interest also for the understanding of our results. We actually are interested in the cutting action which shortens the P22-DNA concatenates during the maturation process and which is strongly correlated with the mechanism of transduction, too.
With separate mail I am sending you reprints and copies of my papers on P22.

Yours sincerely,

H. Schmieger

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